

**Environmental Assessment for Fences
Allotment #65037
EA# NM-060-2001-0051**

Roswell Field Office
Bureau of Land Management
2909 West 2nd
Roswell, NM 88201

T9S R25E, T9S R26E, T10S R25E, T10S R26E various sections

I. Introduction

A. Purpose and Need for the Proposed Action

Jack Hagelstein, the permittee on Comanche Hill Allotment #65037 is in the process of developing a Holistic Resource Management (HRM) grazing system. To facilitate the implementation of a grazing management system, he wants to divide the current pastures into smaller pastures. The division of some pastures will affect public lands within the allotment. He has requested to construct electric fences to divide the South pasture into three smaller pastures.

Also, a population of the Pecos sunflower, a federally listed species, was discovered in the Northwest pasture on the allotment in September 2000. A permanent 4 strand barb wire fence is being proposed to divide this pasture in an effort to facilitate grazing management and to minimize the impacts of grazing on this species.

B. Conformance with Land Use Planning

The Roswell Resource Management Plan/Environmental Impact Statement (October 1997) has been reviewed to determine if the proposed action conforms with the land use plan's Record of Decision as required by 43 CFR 1610.5-3. The proposed action is consistent with the RMP/EIS.

C. Relationships to Statutes, Regulations, or Other Plans

The proposed action and alternative is consistent with the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1700 et seq.); the Taylor Grazing Act of 1934 (43 U.S.C. 315 et seq.), as amended; the Clean Water Act (CWA)(33 U.S.C. 1251 et seq.), as amended; the Endangered Species

Act (16 U.S.C. 1535 et seq.) as amended; the Public Rangelands Improvement Act of 1978 (43 U.S.C. 1901 et seq.); Executive Order 11988, Floodplain Management and Executive Order 11990, Protection of Wetlands.

II. Proposed Action and Alternatives

A. Proposed Action :

The proposed action is to construct approximately 3.25 miles of 2 strand electric fence and approximately 1.25 miles of 4 strand barb wire fence. For the electric fence, posts will be steel "T" posts. The fence would have the bottom wire at 20" and the top wire not to exceed 36". Gates and/or cattle guards will be placed at points where the fence line crosses roadways.

The four strand fence will be constructed in accordance with the Roswell Field Office standard fence stipulations and under a BLM contract. The wire spacing will be (from ground up) 16"-6"-8"-12", the bottom wire will be smooth, blading may occur to remove brush and level hummocky ground, no maintenance road will be constructed alongside the fence, and the BLM reserves the right to alter any portion of the fence on federal land should it be necessary for wildlife purposes.

The permittee will furnish all materials and labor for the electric fences and the BLM will construct the four wire fence. Both fences will be authorized under a Co-operative Agreement.

Please refer to attached map for fence route and additional information.

B. No Fences Would Be Constructed alternative:

Under this alternative neither the electric or four wire fence would be constructed.

III. Affected Environment

A. General Setting

Allotment #65037 is located in Chaves county, about 10 miles east of Roswell. The allotment consists of 6 pastures and 2 traps. This allotment contains 11,874 acres of which 6,228 acres are Federal land.

This allotment is located within the Grassland vegetative community as identified within the Roswell RMP. The distinguishing feature for the grassland community is that grass species typically comprises 75% or more of the potential plant community. Short-grass, mid-grass, and tall-grass species may be found within this community. The community also includes shrub, half-shrub, and forb species. The percentages of grasses, forbs, and shrubs actually found at a particular location will vary with weather factors and past resource uses.

The following resources or values are not present or would not be affected: Prime/Unique Farmland, ACEC's, Minority/Low Income Populations, Wild and Scenic Rivers, Hazardous/Solid Wastes, Floodplains, Native American Religious Concerns. Cultural inventory surveys would continue to be required for federal actions involving surface disturbing activities. The impact of the proposed action and alternatives to minority or low-income populations or communities has been considered and no significant impact is anticipated.

B. Affected Resources

1. Soils: The soils present within this allotment belong to the Hollomex-Reeves-Milner general mapping unit. These soils are deep, well drained, nearly level to undulating soils on terraces. For more information, refer to Soil Survey of Chaves County New Mexico, Northern Part. There is a certain amount of erosion that occurs naturally in this vegetation community. High winds in the spring and high intensity thunderstorms are the primary agents of soil transportation.

2. Vegetation: This allotment is within the grassland vegetative community as identified in the Roswell Resource Management Plan/Environmental Impact Statement (RMP/EIS). The dominant ecological (range) sites on the allotment are Loamy SD-3 and Sandy SD-3. Range site descriptions are available for review at the Roswell BLM office or any Natural Resources Conservation Service office.

The present plant community is primarily warm season perennial grasses and forbs with a shrub component of fourwing saltbush and morman tea. Dominant grass species include blue grama, gyp grama, black grama, sand dropseed, tobosa grass, alkali sacton, three awns, ring muhly and vine mesquite. The shrub community is primarily fourwing saltbush, opuntia species, and morman tea. Forbs include coldenia species, globemallow, and numerous annual forbs.

3. Wildlife: Game species occurring within the area include mule deer, antelope, mourning dove, and scaled quail. Raptors that utilize the area on a more seasonal basis include the swainson's, red-tailed, and ferruginous hawks, American kestrel, and great-horned owl. Numerous passerine birds utilize the grassland areas due to the variety of grasses, forbs, and shrubs. The most common include the western meadowlark, mockingbird, horned lark, killdeer, loggerhead shrike, and vesper sparrow.

The warm prairie environment supports a large number of reptile species compared to higher elevations. The more common reptiles include the short-horned lizard, lesser earless lizard, eastern fence lizard, coachwhip, bullsnake, prairie rattlesnake, and western rattlesnake.

A general description of wildlife occupying or potentially utilizing the proposed action area and associated Habitat Management Areas refer to the Affected Environment Section (p. 3-62 to 3-71) of the Draft Roswell RMP/EIS (9/1984).

4. Threatened and Endangered Species (T/E): The Pecos sunflower is a federally listed species that is known to occur on the allotment. The mountain plover is a federal proposed species that has the potential to occur on the allotment. There are no other known threatened or endangered species on this allotment. A list of special status species reviewed for this EA was provided by the USFWS through a Memorandum dated June 8, 2000, Threatened and Endangered Species List for Grazing Environmental Analyses in the Roswell Field Office Area (on file at the RFO). There are no designated critical habitat areas for T/E species within this allotment. The status and presence of these species in the RFO area is discussed in the following section.

Pecos (Puzzle) Sunflower - Helianthus paradoxus

The Pecos sunflower is found along alkaline seeps and cienegas of semi-desert grasslands and the short-grass plains (4,000-7,500 feet elevation). Plant populations are found both in water and immediately adjacent to water sources where the water table is near the surface. This species has spotty distribution in the RFO area and is found in only a few areas outside of the BLNWR. A new population was found in 1994 at Bottomless Lakes State Park, growing on the margins of Lea Lake and its outflow. Lloyd's Canyon, located on Allotment 65137, was the only known location on public land up to the year 1999. The Pecos sunflower only became evident at this location following a prescribed fire. In September 2000, another small population, located on Allotment 65037, was found on

public lands at a spring source within a small draw. The location is about two miles south of Lloyd's Canyon. Both areas are located on the east side of the Pecos River.

Continued surveys along the Pecos River have been conducted by the New Mexico Energy, Minerals and Natural Resources Division through riparian studies, and by BLM staff during routine field reconnaissance. The largest and most secure population is still found on BLNWR. No other populations were found on public land on the other allotments during the year 2000 field season.

Mountain Plover - Charadrius montanus

Mountain plovers are mainly a species of the high plains and semi-desert regions of the western United States. They prefer flat, short-grass prairie and tend to avoid taller grasses and hillsides (Graul 1975). Suitable habitat often occurs in intensively grazed areas. This species also occupies prairie dog colonies, particularly in mid- and tall-grass prairie ecosystems. Migrants occasionally occur on dry mudflats and shorelines of dry reservoirs (Andrews and Richter 1992).

Surveys have been conducted in New Mexico for the mountain plover by Lawry Sager in 1995, for the New Mexico Department of Game and Fish (Sager, 1996). No breeding populations were found south of the 34° North Latitude which generally follows the Chaves/DeBaca County line on the north end of the Roswell Field Office area. However, no birds were reported in either DeBaca or Chaves Countys; only one observation was reported in Lincoln County (near Lon). In addition, mountain plover surveys were conducted in 1998 at BLM selected sites by New Mexico Natural Heritage Program (DeLay & Johnson, 1998). No mountain plovers were observed at the sites.

5. Livestock Management: The allotment is grazed by cattle. There are 6 pastures and 2 traps. The permittee runs a single herd on the allotment. A Holistic Resource Management system is used. Pastures are grazed in accordance with a biological plan. The grazing duration for each is varied and is dependent on forage quality and quantity, pasture size, plan objectives and constraints. Typically, during the growing season a pasture may be grazed from 7 to 14 days with a recovery period of 90-120 days before the next grazing period. During the dormant season the grazing period for pastures is increased in duration and is based on a desired forage utilization level not to exceed 45 percent. In some cases a pasture may not be grazed during the dormant or the growing season.

6. Visual Resources: The allotment is located within a Class II where it is adjacent to Bitter Lakes National Wildlife Refuge. The rest of the allotment is located within a Class IV Visual Resource Management area. The Class II rating means that any changes in any basic elements (form, line, color, texture) caused by a management activity should not be evident in the landscape. A contrast may be seen but should not attract attention. The Class IV rating means that contrasts may attract attention and be a dominant feature in the landscape in terms of scale. However, the changes should repeat the basic elements of the landscape.

7. Water Quality: Perennial surface water is not found on the allotment, but two springs are located in unnamed draws that drain to the Pecos River. Both have historically been little more than seeps, but in recent years have dried up.

Two spring heads were found in Section 24 in the past. In 1983 discharge was estimated at less than one gallon per minute, and samples showed the pH to be 8.8 and specific conductance to be approximately 17,000 $\mu\text{mhos/cm}$, an indication of high ion concentration. Another spring in Section 13 also has little flow and has been dry in recent years. No water quality data are available, but the specific conductance is probably high here also.

8. Air Quality: Air quality in the region is generally good. The allotment is in a Class II area for the Prevention of Significant Deterioration of air quality as defined in the federal Clean Air Act. Class II areas allow a moderate amount of air quality degradation.

9. Recreation: Since this allotment has no facility based recreational activities, only dispersed recreational opportunities occur on these lands. Recreational activities that occur include hunting, caving, sightseeing, Off Highway Vehicle Use, primitive camping, horseback riding and hiking.

This area offers horseback riding adventures to the citizens of Roswell. Extensive use by equestrians occurs on weekends throughout the year. This area offers excellent horseback riding opportunities due to the extensive trail system. The area has some outstanding overlooks of the city of Roswell and Bitter Lakes National Wildlife Refuge.

Legal and physical Access to public lands located in this allotment are through state lands and county maintained roads. To protect the scenic quality for Bitter Lake National Wildlife Refuge, T10S R25E Sections 11 and 14 are designated as "closed" for all OHV use. The remainder of public

lands within this allotment are classified as "Limited" to existing roads and trails. The majority of public lands in this allotment can only be accessed by foot (hiking, or walking) and by horseback.

10. Cave/Karst: This allotment is located within a designated area of High Karst and Cave Potential. Although a complete significant cave or karst inventory has not been completed for the public lands located in this grazing allotment, extensive cave resources are located within the allotment. At least 3 significant caves are located within the allotment. Monitoring of the Cave/Karst feature(s) will be necessary to determine if protective measures are required in the future.

11. Wetlands/Riparian: Two springs are found on Allotment 65037. The first is a small spring located in the unnamed draw in Section 24. Shallow ground water along with ephemeral surface runoff provides enough moisture to support a riparian vegetation community. Species include inland saltgrass, alkali sacaton, rushes and sedges, scattered saltcedar, and a population of the threatened Pecos sunflower.

The erosion of cow trails in the draw bottom has created a series of large pedestals. The tops of the pedestals are at the original bed elevation and are generally well vegetated, but the soil around them has been scoured and compacted. Low areas in the draw that collect runoff are devoid of vegetation. The accumulation of salts and the gypsiferous soils will make plant regeneration difficult in these areas.

McCrea Spring is another spring located on BLM land in Section 13. The spring head was fenced in 1983. There are scattered clumps of grasses and forbs in the draw, but the gypsum bluffs and dominance of saltcedar limit vegetation growth.

12. Invasive, Nonnative Species: A population of African Rue exists on this allotment. It is located along a 50 yard stretch of county road. Heavy equipment is probably the cause of the infestation. At this time the African Rue is restricted to the area of disturbance along the road.

IV. Environmental Impacts

A. Impacts of the Proposed Action

1. Soils: Under the proposed action direct impacts to soils would be negligible in the construction of the electric fence. The permanent four wire fence would have some short lived impacts if blading were to occur to

remove brush or to level hummocky areas. Vegetative and ground cover would be restored with the following growing season.

2. Vegetation: The grazing scheme that is used will have beneficial impacts to the vegetative resources. The shortened period of grazing for each pasture will ensure that the vegetative resources will not be over grazed and the recovery period of 90 - 120 days will ensure regrowth and the replenishment of plant energy reserves prior to be grazed again. It is anticipated that plant diversity in the monotypic stands of alkali sacaton and tobosa grass will increase as the canopy cover of these grasses are opened up.

3. Wildlife: Big game movement may be hindered in the short term until they become used to the fence. As long as the fence is built according to the proposed action, they should be able to adapt to it and negotiate it successfully.

4. Threatened and Endangered Species:

Pecos (Puzzle) Sunflower - Helianthus paradoxus

The increased number of pastures and current grazing management would not impede potential habitat within the draws that support springs from becoming more suitable habitat, and would not impede the further improvement of existing riparian-wetland habitat on public lands. It is possible that, under conditions that would promote sunflower growth, the populations would expand.

The division of the Northwest pasture with a permanent fence will facilitate livestock management while providing protection to the sunflower population. Grazing will be deferred in the pasture with the sunflower population during the crucial growth and flowering period of the sunflower. The response of the sunflower population on the allotment is dependent upon the timing of precipitation, the availability of soil moisture during the critical germination period and the deferment from grazing during this period.

Effect Determination: May Affect, Not Likely to Adversely Affect. The effects due to livestock grazing authorization on the allotment are either wholly beneficial, or have adverse aspects that are discountable or insignificant.

Mountain Plover - Charadrius montanus

Grazing practices which maximize utilization of vegetation resources could increase mountain plover habitat, and is unlikely to adversely affect this species or its habitat on the allotment. Since no known wintering locales or breeding sites have been found and no known prairie dog towns are located within this allotment, grazing management would not likely jeopardize, destroy or adversely modify the habitat. As mountain plovers prefer short vegetation and actually seek out grazed pastures, the impacts from grazing are not anticipated to adversely affect the bird.

Effect Determination: Not Likely to Jeopardize the Continued Existence of the Species; Not Likely to Jeopardize, Destroy or Adversely Modify Habitat.

5. Livestock Management: Livestock management flexibility would change with the implementation of the proposed action. The permittee would have more flexibility in determining when to graze which pasture and at what time. The smaller pastures will promote better livestock control. No adverse impacts are anticipated.

6. Visual Resources: The proposed action would not affect the form or color of the landscape, or the primary aspect of the vegetation within the allotment.

7. Water Quality: The proposed action would not have a significant effect on ground water. The division of the Northwest pasture with a permanent fence may provide positive benefits to the spring and draw area in Section 24. The high-intensity, short-duration grazing during dry periods in the dormant season could provide water-quality benefits. Hoof impact would reduce the size of the pedestals, obliterate some trails, and tend to fill in low, barren areas in the draw. Vegetation would become established more easily, and stormwater would tend to infiltrate rather than pond on the surface. More salts would be leached from the surface, also enhancing vegetation establishment.

8. Air Quality: During the construction of the permanent fence dust levels under the proposed action would be slightly higher than under the no action alternative. The levels would still be within the limits allowed in a Class II area for the Prevention of Significant Deterioration of air quality.

9. Recreation: Implementation of the proposed action should have little or no impact on the dispersed recreational opportunities within this allotment, since access gates will be provided for ingress and egress to the public lands.

10. Cave/Karst: Implementation of the proposed action should have little or no impact on cave/karst resources.

11. Wetlands/Riparian: The proposed action will not impact the riparian vegetation of the springs located on the allotment.

12. Invasive, Nonnative Species: The proposed action would not be a significant source of the spread of African Rue within the allotment. A Memorandum of Understanding exists between Chaves County, the state of New Mexico, and the BLM for weed control. An environmental assessment has been written and approved for noxious weed treatment within the Roswell Field Office.

B. Impacts of the No Action Alternative.

1. Soils: There would be no impacts to the soils and ground cover since the fence construction activities would not occur.

2. Vegetation: Under the No Action alternative there would be no impacts to the vegetative resources.

3. Wildlife: Under the No Action alternative there would be no impacts to the wildlife resources.

4. Threatened and Endangered Species: Under the No Action alternative the impacts to the sunflower population would be similar to that of the Proposed Action. The Northwest pasture (in the current configuration) would be deferred from grazing during the crucial growth period of the sunflower. The response of the known sunflower population on the allotment is dependent upon the timing of precipitation and the availability of soil moisture during the critical germination period. Mountain plover habitat may decline since plovers tend to select grazed to overgrazed areas.

5. Livestock management: The No Action alternative will continue to limit the management flexibility of the permittee. The entire Northwest pasture would have to be deferred during the crucial growth period of the sunflower instead of the smaller area under the Proposed Action. The large South pasture will continue to be grazed as it is currently. The permittee will continue to haul water and herd the livestock to get the distribution and utilization patterns desired.

6. Visual Resources: There would be no change in the visual resources.

7. Water Quality: Under the No Action alternative there would be no impacts to water quality.
8. Air Quality: There would be a slightly less dust under this under this alternative versus the proposed alternative, but this would be negligible when considering all sources of dust.
9. Recreation: There would be no impacts to recreation under the No Action alternative.
10. Cave/Karst: There would be no effect to this resource from the No Action alternative.
11. Wetland/Riparian: There would be no impacts to the riparian areas under the No Action alternative.
12. Invasive, Nonnative Species: Removal of livestock grazing would have no affect on the African Rue within this allotment since livestock are not the primary cause of it's spread.

V. Cumulative Impacts

There would be no additional cumulative impacts to the area by the construction of the fence.

VI. Residual Impacts

There would be no residual impact.

VII. Mitigating Measures

There is no need for mitigation measures if the fence is built to the standards as identified in the proposed action.

VIII. Persons or Agencies Consulted

The following are people who have been consulted for their comments in regards to the proposed action, in addition to the resource area specialists.

Jack & Patrica Hagelstein, Permittee
Dick Wiliford, New Mexico State Land Office
Kirk Gadzia, HRM Consultant
Tim Henry, Natural Resource Conservation Service

FINDING OF NO SIGNIFICANT IMPACT/RATIONALE and Decision Record

FINDING OF NO SIGNIFICANT IMPACT: I have reviewed this environmental assessment including the explanation and resolution of any potentially significant environmental impacts. I have determined the **proposed action** will not have significant impacts on the human environment and that preparation of an Environmental Impact Statement (EIS) is not required.

Rationale for Recommendations: The proposed action would not result in any undue or unnecessary environmental degradation. The **proposed action** will be in compliance with the Roswell Resource Management Plan and Record of Decision (October, 1997).

Decision: It is my decision to approve the proposed action of Environmental Assessment #NM-060-2001-051.

Rationale for Decision: The decision to allow the proposed action would not result in any undue or unnecessary environmental degradation and is in conformance with the Roswell Resource Management Plan and Record of Decision (October, 1997).

In accordance with 43 CFR 4160.2, any applicant, permittee, lessee, or other affected interests may protest this proposed decision in person or in writing to the authorized officer at 2909 West 2nd St., Roswell, NM 88201, within 15 days after receipt of this decision. Please be specific in your points of protest. In the absence of a protest, this decision will become final without further notice.

Written appeal may be filed to the Final Decision for the purpose of a hearing before an administrative law judge under 43 CFR 4.470. A period of 30 days after receipt of the Final Decision is provided in which to file an appeal in this office. (43 CFR 4160.3 (c)).

Trk

1/29/01

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T. R. Kreager,
Acting Assistant Field Office Manager - Resources

Date